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(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
11 January 2001 (11.01.2001)

PCT

(10) International Publication Number
WO 01/02552 A2

(51) International Patent Classification?: C12N 15/00,
A01K 67/027, C07K 14/47, C12N 5/10

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(21) International Application Number: PCT/EP00/06171

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(22) International Filing Date: 30 June 2000 (30.06.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
9915574.9 2 July 1999 (02.07.1999) GB
0002674.0 4 February 2000 (04.02.2000) GB

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(81) Designated States (national): AE, AL, AM, AT, AU, AZ,
BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK,
DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— Without international search report and to be republished
upon receipt of that report.

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: TRANSGENIC ANIMALS AS MODELS FOR NEURODEGENERATIVE DISEASE

(57) Abstract: There is provided a nucleic acid vector comprising: (a) a nucleic acid sequence encoding a human Tau protein; (b) a sequence capable of directing expression of said human Tau protein in the nervous system of a non-human animal; and (c) a targeting sequence which facilitates integration of said vector into the genome of said animal so as to prevent expression of equivalent Tau protein or a related or equivalent protein from said animal in favour of said human Tau protein. A further aspect provides a nucleic acid vector comprising: (a) a nucleic acid sequence encoding a human protein capable of modulating human Tau protein; (b) a sequence capable of directing expression of said protein in the nervous system of said animal; and (c) a targeting sequence capable of facilitating integration of said vector into the genome of said animal optionally at a position corresponding to a sequence in said animal encoding an equivalent of said human protein so as to prevent expression of said equivalent sequence in favour of said human protein capable of modulating human Tau protein. The vectors are used to make a transgenic non-human animal by (a) introducing into an embryo cell of said animal one or more of a nucleic acid vector as described above; (b) introducing the embryo from step (a) into a female animal; (c) sustaining the female in step (b) until such time as the embryo has sufficiently developed and is borne from the female; and (d) sustaining the transgenic animal.

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